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ABSTRACT

This paper provides an overview of partnerships between corporations and schools in the United States. It discusses nine different types of partnerships, their purposes, their leadership, and what each of the parties gets from them. The nine types discussed are the following: (1) employers extending a helping hand in the form of the adopt-a-school movement, management advice, and joint funds in aid of public education; (2) collaborative councils; (3) transition to work programs; (4) cooperative education between employers and schools; (5) vocational education; (6) experience-based career education; (7) partnerhips for economic development; (8) contracting out of occupational training by educational institutions; and (9) industry contracting with schools to meet internal training needs. Recommendations touch on the need for more information about various aspects of school business partnerships. (RDN)

PARTNERSHIPS BETWEEN CORPORATIONS AND SCHOOLS

by

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EXECUTIVE SUMMARY

PURPOSE

THIS PAPER PROVIDES AN OVERVIEW OF PARTNERSHIPS BETWEEN CORPORATIONS AND SCHOOLS IN THE UNITED STATES. IT DISCUSSES THE DIFFERENT TYPES OF PARTNERSHIPS, THEIR PURPOSES, WHO PROVIDES LEADERSHIP, WHAT EACH OF THE PARTIES GET FROM THEM, AND PROVIDES EXAMPLES OF EACH PARTNERSHIP TYPE AS WELL AS REFERENCES FOR MORE INTENSIVE STUDY. PARTNERSHIPS ARE IDENTIFIED IN NINE AREAS (FOUR-YEAR COLLEGES AND UNIVERSITIES ARE NOT INCLUDED).

1. THE HELPING HAND

FOR A GREAT MANY YEARS BUSINESS PEOPLE WERE PARTICIPANTS IN THE PUBLIC EDUCATION ENTERPRISE, AND GENERALLY BELIEVED THAT PUBLIC EDUCATION SERVED BUSINESS WELL. THE TURMOIL CENTERING ON PUBLIC EDUCATION, BEGINNING IN THE 1960s, MADE PUBLIC EDUCATION CONTROVERSIAL, PARTICIPATION MORE RISKY FOR CORPORATIONS, AND A LESS REWARDING ACTIVITY FOR THEIR EMPLOYEES. SO THERE WAS A PERIOD OF LESSENED INTEREST AND INVOLVEMENT. IN RECENT YEARS THE TREND HAS BEGUN TO SHIFT BACK AS MORE EMPLOYERS RECOGNIZE THE IMPORTANCE TO BUSINESS AND SOCIETY OF BETTER QUALITY SCHOOLING. MORE EMPLOYERS HAVE EXTENDED A "HELPING HAND" IN THE FORM OF THE ADOPT-A-SCHOOL MOVEMENT, MANAGEMENT ADVICE, AND JOINT FUNDS IN AID OF PUBLIC EDUCATION.

2. COLLABORATIVE COUNCILS

A NEW FORM OF PARTNERSHIP ARRIVED ON THE SCENE IN THE MID-1970s, WITH SOME EARLY FORMS DATING FROM THE 1960s AND EARLIER.

THESE ARE KNOWN GENERICALLY AS COLLABORATIVE COUNCILS AND APPEAR AT THE LOCAL LEVEL UNDER MANY NAMES, OF WHICH EDUCATION-WORK COUNCIL AND INDUSTRY-EDUCATION-LABOR COUNCIL ARE THE MOST FREQUENT. THESE COUNCILS ARE PRIVATE SECTOR EFFORTS COMPOSED PREDOMINANTLY OF EMPLOYER, EDUCATION, AND UNION REPRESENTATIVES, BUT ALSO INCLUDING VOLUNTARY SERVICE ORGANIZATIONS AND LOCAL GOVERNMENT. THEY PROVIDE A PROCESS OF COLLABORATION THAT HAS RESULTED IN HUNDREDS OF INDIVIDUAL PROJECTS AND PROGRAMS.

3. TRANSITIONS TO WORK

THERE IS A COLLECTION OF NATIONAL, LOCAL, AND INDIVIDUAL EMPLOYER PROGRAMS THAT INVOLVE EASING THE TRANSITION FROM SCHOOL TO WORK, OR FROM "DROPOUT" STATUS TO WORK. THEY DIFFER CONSIDERABLY, AND ARE AMONG THE MORE PUBLICIZED PARTNERSHIP EFFORTS. THESE ARE JOINT PROGRAMS TO HELP YOUTH MOVE FROM SCHOOL TO JOBS, OR TO GET BRUSH-UP JOB SKILLS, OR GET JOB SEARCH INSTRUCTION, OR WORK EXPERIENCE, OR COUNSELING, OR ALL OF THESE COMBINED. MOST, BUT NOT ALL, ARE CONCENTRATED ON MINORITIES AND THE DISADVANTAGED. IT IS IN SUCH PROGRAMS WHERE WE HAVE SEEN THE MOST MOMENTUM DURING THE LAST DECADE, WITH THE POSSIBLE EXCEPTION OF THE ADOPT-A-SCHOOL EFFORTS, WHICH OFTEN HAVE SIMILAR OBJECTIVES.

4. COOPERATIVE EDUCATION

COOPERATIVE EDUCATION IS TRULY A JOINT UNDERTAKING BETWEEN EMPLOYERS AND SCHOOLS IN WHICH THE EMPLOYER PROVIDES PAID OPPOR-

TUNITIES FOR ON-THE-JOB LEARNING AND THE SCHOOL PROVIDES THE CLASSROOM INSTRUCTION. ITS ROOTS ARE EARLY IN THIS CENTURY IN HIGHER EDUCATION; DAYTON, OHIO ESTABLISHED A HIGH SCHOOL ON THIS BASIS IN 1914 (STILL OPERATING). COOPERATIVE EDUCATION OFFERS MANY ADVANTAGES INCLUDING EMPLOYER-SCHOOL COOPERATION, A MARKET TEST FOR OCCUPATIONAL TRAINING, EXPERIENCE THAT LEADS TO PLACEMENT AFTER GRADUATION, AND TRAINING ON STATE-OF-THE-ART EQUIPMENT. DESPITE THESE ADVANTAGES IT REPRESENTS ONLY A SMALL FRACTION OF SECONDARY VOCATIONAL EDUCATION, BUT THIS FORM OF PARTNERSHIP IS GROWING RAPIDLY IN COMMUNITY COLLEGES.

5. VOCATIONAL EDUCATION

BECAUSE OF ITS SIZE, VOCATIONAL EDUCATION HAS THE MOST EXTENSIVE INVOLVEMENT WITH EMPLOYERS OF ANY SECTOR OF PUBLIC EDUCATION, ALTHOUGH THE DEPTH OF THAT PARTICIPATION IS UNEVEN. THE MOST PREVALENT FORM OF PARTICIPATION IS THROUGH THE 30,000 TO 40,000 EMPLOYER ADVISORY COMMITTEES TO VOCATIONAL EDUCATION AT THE NATIONAL, STATE, AND LOCAL LEVELS. IN RECENT YEARS NEW KINDS OF PARTNERSHIPS HAVE BEEN ESTABLISHED IN THE AREAS OF EQUIPMENT DONATION, JOINT DEVELOPMENT OF CURRICULUM, OCCUPATIONAL INFORMATION, AND ON-SITE WORK AND LEARNING EXPERIENCES. WHILE MOST OBSERVERS AGREE THAT EMPLOYER INVOLVEMENT IS TOO LIMITED, THERE IS A GROWING NUMBER OF EXAMPLES OF GOOD PARTNERSHIPS FOR EMULATION. THE AMERICAN VOCATIONAL ASSOCIATION HAS RECENTLY ASSIGNED HIGH PRIORITY TO ENCOURAGING COLLABORATION WITH INDUSTRY, AS HAS THE U.S. DEPARTMENT OF EDUCATION.

6. EXPERIENCE-BASED CAREER EDUCATION

EXPERIENCE-BASED CAREER EDUCATION (EBCE) IS AN INNOVATION IN LINKING THE WORKPLACE AND THE SCHOOL THAT DATES BACK TO THE EARLY 1970s. ITS DEVELOPMENT WAS CARRIED OUT BY FOUR OF THE REGIONAL EDUCATION LABORATORIES, FUNDED BY THE FEDERAL GOVERNMENT. BEFORE BEING IMPLEMENTED AT THE LOCAL LEVEL, EBCE WAS CAREFULLY EVALUATED, AND FOUND TO BE MEETING THE OBJECTIVES SET FOR IT. WITH TECHNICAL ASSISTANCE PROVIDED BY THE NATIONAL INSTITUTE OF EDUCATION, THE MODEL HAS BEEN INSTALLED IN ABOUT 150 SCHOOL DISTRICTS. EBCE STRESSES THE ACQUISITION OF LIFE SKILLS, ACHIEVEMENT OF A SET OF SPECIFIC COMPETENCIES, PROFICIENCY IN THE BASIC SKILLS OF READING, MATHEMATICS, AND COMMUNICATIONS, AND SUBSTANTIAL TIME AT WORK SITES (PRIVATE EMPLOYERS AND OTHER COMMUNITY ORGANIZATIONS) FOR CAREER EXPLORATION AND EXPERIENCE-BASED LEARNING.

7. PARTNERSHIPS FOR ECONOMIC DEVELOPMENT

IN A GROWING NUMBER OF STATES AND LOCALITIES, JOB TRAINING AND OCCUPATIONAL EDUCATION IS OFFERED TO ATTRACT NEW INDUSTRY OR EXPAND EXISTING ONES. STUDIES OF THE FACTORS EMPLOYERS EMPHASIZE IN DECIDING PLANT LOCATION AND EXPERIENCE WITH EXISTING TRAINING/ EDUCATION PROGRAMS CONFIRM THAT EDUCATION AND TRAINING PROMOTE ECONOMIC DEVELOPMENT. THE THREE BASIC MODELS ARE (1) STATE EFFORTS THAT ARE CONCENTRATED IN A SINGLE AGENCY WHICH COORDINATES ALL OTHER EFFORTS; (2) FUNCTIONS SHARED AMONG STATE AGENCIES WITH VOCATIONAL EDUCATION HAVING THE LEAD IN TRAINING; AND (3) CITIES, COUNTIES, AND COMMUNI-

TIES THAT USE FEDERAL AND LOCAL RESOURCES TO CARRY OUT THEIR OWN PROGRAMS. TRAINING IS USUALLY OFFERED AT NO COST TO THE EMPLOYER, AND EMPLOYERS PLAY KEY ROLES IN IDENTIFYING THE TRAINING, AND FREQUENTLY IN CARRYING IT OUT.

8. CONTRACTING OUT BY EDUCATION

AT A TIME WHEN EDUCATION INSTITUTIONS ARE LOOKING WITH ENVY AT THE LARGE AMOUNTS OF MONEY EMPLOYERS SPEND FOR INTERNAL TRAINING AND EDUCATION, AND WOULD LIKE TO SEE MORE OF THAT TRAINING PROVIDED BY THE SCHOOLS, THERE IS EMERGING A NEW PRACTICE COUNTER TO THIS OBJECTIVE. A SMALL BUT GROWING NUMBER OF COMMUNITY COLLEGES ARE CONTRACTING OUT THEIR OCCUPATIONAL TRAINING TO INDUSTRY. THIS PRACTICE HAS DEVELOPED SINCE THE MID-1970s. THE TWO LEADING EXAMPLES CONTRACT OUT ALL THEIR TRAINING TO INDUSTRY AND PROVIDE SUPPLEMENTARY INSTRUCTION IN THE CLASSROOM. IN ONE OF THESE SCHOOLS, THE CLASSROOM TRAINING IS ALSO CONTRACTED TO OTHER SCHOOLS, SO AS TO AVOID DUPLICATION OF FACILITIES. A HALF DOZEN OTHER COMMUNITY COLLEGES ARE IN DIFFERENT STAGES OF IMPLEMENTING THIS MODEL, AT LEAST ON A MODIFIED BASIS. THESE SCHOOLS ARE CONTRACTING OUT IN SITUATIONS WHERE THERE ARE ONLY A FEW JOB OPENINGS AND IT WOULD NOT BE PRACTICAL TO ESTABLISH A SEPARATE COURSE ON THE CAMPUS. THESE CONTRACTING-OUT COLLEGES EMPHASIZE THE ADVANTAGES TO THE STUDENTS OF BEING TRAINED AT THE PLACE OF EMPLOYMENT, THE HIGH PLACEMENT RATES OBTAINED FROM SUCH PROGRAMS, AND ADVANTAGES OF INTER-RELATING EXPERIENCE AND CLASSROOM INSTRUCTION.

9. INDUSTRY CONTRACTING WITH EDUCATION

WHILE IT IS ESTIMATED THAT SOMEWHERE FROM $30 TO $40 BILLION IS SPENT BY INDUSTRY ON INTERNAL TRAINING AND EDUCATION, THERE IS A SUBSTANTIAL NUMBER OF EXAMPLES OF INDUSTRY CONTRACTING WITH SCHOOLS TO MEET INTERNAL TRAINING NEEDS. THIS IS A PRACTICE THAT A GREAT MANY SCHOOLS WOULD LIKE TO SEE ENLARGED, PARTICULARLY AS THEY FACE BUDGET CUTS FROM DECLINING YOUTH ENROLLMENTS AND CUTS IN GOVERNMENT SUPPORT AT ALL LEVELS. FROM PRACTICES EXAMINED HERE, IT LOOKS AS IF NEW BUSINESS FROM INDUSTRY IS NOT LIKELY TO FALL IN THE LAPS OF SCHOOLS WITHOUT SUBSTANIAL EFFORTS TO OBTAIN IT. THE PRACTICES THAT HAVE BEEN EXAMINED HAVE ONE THING IN COMMON: ALL THE SCHOOLS SET UP SPECIAL PROGRAMS AND OFFICES, TREAT THEM AS BUSINESSES, AND GO OUT TO CONVINCE INDUSTRY THAT THEY COULD DO THE TRAINING MORE CHEAPLY OR BETTER, OR BOTH. TYPICALLY, THE SCHOOL PUTS UP MONEY OUT OF GENERAL FUNDS, EXPECTING IT TO BE PAID BACK, AND EXPECTING TO EARN A PROFIT FOR THE SCHOOL. WHILE SOME PROGRAMS ARE VERY NEW, THE GENERAL EXPERIENCE IS THAT THESE EXPECTATIONS ARE IN FACT USUALLY MET.

SOME OBSERVATIONS

CORPORATION-SCHOOL PARTNERSHIPS ARE CURRENTLY RECEIVING A LOT OF ATTENTION, AND THERE IS NOW CONSIDERABLE EXPERIENCE WITH A VARIETY OF PARTNERSHIPS. MUCH OF THIS EXPERIENCE IS ONLY FIVE TO TEN YEARS OLD: HOWEVER, A SUBSTANTIAL AMOUNT TRACES BACK FOR DECADES, AS IN THE CASE OF COOPERATIVE EDUCATION AND THE BETTER PRACTICES IN VOCATIONAL EDUCATION. EXAMINATION OF THE DETAIL PROVIDED

IN THIS PAPER WILL ILLUMINATE THE DIFFERENT REASONS THESE PARTNERSHIPS GREW UP, OR ARE NOW COMMENCING. PARTNERSHIPS SPRING FROM A VARIETY OF MOTIVATIONS ON THE PART OF SCHOOLS AND EMPLOYERS. TO SAY THAT THE NATURE OF THESE PARTNERSHIPS VARIES IS AN UNDERSTATEMENT. SOME PRACTICES ARE THE MIRROR IMAGE OF OTHERS: INDUSTRIES CONTRACTING WITH SCHOOLS IN SOME PLACES, SCHOOLS CONTRACTING WITH INDUSTRY IN OTHERS. EMPLOYERS LONG ENGAGED IN COOPERATIVE EDUCATION PROGRAMS FIND INVOLVEMENT NATURAL AND ONE MEANS OF MEETING LABOR SUPPLY NEEDS. NEW EFFORTS BY CORPORATIONS TO LEND A HELPING HAND TO THE SCHOOLS SPRING FROM THE REALIZATION THAT THE QUALITY OF EDUCATION IS SLIPPING, AND PUBLIC BUDGETS ARE UNABLE TO MEET ALL OF THE SCHOOLS' NEEDS. JOINT PROGRAMS IN WHICH STUDENTS ARE PAID REGULAR WAGES EXIST ALONGSIDE PROGRAMS WHERE THE EXPERIENCE GAINED IN THE EMPLOYER'S ESTABLISHMENT IS CONSIDERED EDUCATION, AND NO WAGES ARE PAID. THE EXPLANATION OF SUCH OPPOSITES LIES IN OUR CONSIDERABLE DIVERSITY, IN THE DIFFERENT NEEDS AND PERCEPTIONS OF BOTH EMPLOYERS AND SCHOOLS, AND DIFFERENT TRADITIONS IN DIFFERENT SECTORS OF THE EDUCATION COMMUNITY. WHILE EXISTING EXPERIENCE CANNOT BE CONSIDERED PERVASIVE AND DEEPLY EMBEDDED PRACTICE, IT IS A RICH EXPERIENCE, AND OFFERS A SUBSTANTIAL BASE TO SELECT FROM AND BUILD ON.

THE SOURCES OF MOTIVATION, WHO TAKES LEADERSHIP, AND WHO GETS WHAT FROM THE PARTNERSHIPS VARY WITH THE KIND OF PARTNERSHIP. THESE ARE SUMMARIZED IN THE LAST CHAPTER.

THE RECOMMENDATIONS FOR FURTHER WORK INCLUDE:

1. COLLECTING BETTER INFORMATION AVAILABLE ABOUT ADOPT-A-SCHOOL PROGRAMS, AND MAKING IT AVAILABLE TO EMPLOYERS AND SCHOOLS.
2. DEVELOPING A NETWORK AMONG COLLABORATIVE COUNCILS TO STRENGTHEN THE MOVEMENT AND EXCHANGE BEST PRACTICES.
3. CAREFUL TRACKING OF WHAT EFFECT THESE CORPORATION-SCHOOL ALLIANCES HAVE ON EDUCATION.
4. GATHERING MORE PRECISE INFORMATION ABOUT THE BENEFITS THE PARTIES TO PARTNERSHIPS DERIVE.
5. LONGITUDINAL AND RETROSPECTIVE STUDIES OF SUCCESSFUL AND UNSUCCESSFUL PARTNERSHIPS TO DETERMINE WHAT FACTORS CONTRIBUTE TO SUCCESS OR FAILURE.

INTRODUCTION

The purpose of this paper is to provide an overview of partnerships between corporations and schools in the United States. Some areas where partnerships occur have been relatively well mapped. Others are scarcely known, except in the communities where they take place. My experience has been that when such partnerships are discussed, people are often talking about quite different things, depending on the perspective they bring. A lot of attention (appropriately so) has focused on school/business efforts to better serve the disadvantaged. Practically none has been given to a new phenomenon in which schools contract out their training to industry, which seems counter to the trend most observers find taking place. Monographs on partnerships have frequently ignored vocational education, concentrating on aid from industry to general education. Others have failed to describe the Experience-Based Career Education system, a development of the last decade, and now involving about 150 school districts.

It is the intent of this paper to provide a much larger road map to the various types of partnerships, and to the differing interests and motivations that lie behind them. While the paper is meant to be broad, it was not possible to provide the in-depth treatment of each partnership area that some readers may need. The paper is limited because it draws on partnerships and descriptions of them already known to the author, and the research that has been conducted is principally from secondary sources, although there

was opportunity to talk to a number of people in Washington, D.C. and out. A by-product is a fairly extensive guide to these sources; they can be followed up by those interested in more information in a particular area. No effort was made to deal with partnerships involving four-year colleges and universities.

Finally, this is not an academic exercise. There has been no attempt at a conceptual framework; what now exists grows out of experience, not out of theory. The categories chosen are, I think, convenient to the reader. However, they are not so distinct as to prevent overlap among them. For example, vocational education and community colleges are discussed in the context of the role they play in state and local economic development plans. Similar partnerships, for different purposes, are discussed under the contracting sections and under vocational education. A separate section is provided on cooperative education, but this is really a branch (a neglected one) of vocational education.

Each section attempts to be self-contained, giving the reasons partnerships were established and the nature of them. However, some observations about similarities, differences, and motivations are offered in conclusion, as well as what generalizations are possible about leadership, who benefits, and success and failure of partnerships. Finally, a few recommendations are offered for further work.

1. THE HELPING HAND

There is an historic relationship between business and the public schools, a relationship that weakened in the turmoil in the cities beginning in the 1960s, but which is now seeing restoration on a number of fronts.

The relationship I refer to is more general than the specific joint programs and contractual arrangements described elsewhere in this paper. I refer here to the corporate viewpoint that good schools are very important to corporations, and to the society and economy in which corporations must live, produce, and sell. This relationship has its roots in the last century, roots set deeply and that held firmly through the first half of the present century. As our industrial economy seemed almost continuously to spawn a large need for young entry-level workers (except in recessions), business took great interest in the capability of school systems to educate them. The view developed that a principal role of public education was preparing people for worklife, and the schools were ever expanding their reach into the ranks of the young.

The involvement of business was a close one, and business people became the predominant trustees of the school system, "dominating school board membership almost to the present day."[1/] These business people brought the methods of business management to the schools, and school superintendents began to think of themselves

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1/ Michael Timpane, Corporations and Public Education in the Cities, a report prepared for the Carnegie Corporation of New York, 1982. This section draws heavily from Timpane's excellent report.

as managers of large corporate-type enterprises. According to Michael Timpane, "It is not too much to say that the business community acted as if it 'owned' the schools, until 20-25 years ago." Business felt a rapport with the schools, and thought the schools were performing their tasks well as they accomplished tremendous growth after World War II while producing the recruits for business in an expanding economy and for the growing higher education system.

But the climate shifted. New groups became interested in the schools. More politicians favored issues in public education. Some of the charges against school management took on business overtones. Teachers organized. Mandates emanated from courts and legislatures requiring "equal educational opportunity, due process, and better services for previously neglected groups of students."

Business predominance eroded. Just as important, or more important, schools became the subject of widespread controversy. As this happened there were more problems, and business people's participation was less rewarding, as turmoil increased and disenchantment set in. A role that had enhanced the nature of business people and corporations became fraught with risks of embroilment in the kind of controversy that corporations were not seeking.

But the deterioration that was occurring proceeded to the point where more corporations realized that the whole education and community base that was critical to business was endangered, and the 1970s saw a visible, if still modest, swing back to concern and involvement. Education is still not a matter for much attention in the high-level meetings and in the day-to-day concerns of the chief executive officer; nevertheless, more involvement has been sought,

and different means of providing a new role are being tried out. This involvement emanates chiefly from the middle ranks of corporate enterprises, but sometimes from the CEO as well.

Increased participation in school affairs falls into three general patterns: the still amorphous "adopt-a-school" mini-movement, joint efforts among employers to create funds in aid of public education, and assistance of various types in the management of school systems. In all these efforts there seems to be a consensus about the objective: it is to restore quality to basic education--better reading, writing, and computing. But it is a broad definition of the basics, which includes fundamental qualities business needs in its recruits, such as good attitudes toward work and business objectives, punctuality, and the communications and social skills needed in the work place. Whenever I talk to business groups, the refrain varies very little. It is these basics of which they speak, and they seem not to be demanding more specific job skill training from the secondary schools (although vocational education continues to expand, and a high percentage of its graduates are hired in the occupations for which they are trained).

Adopt-A-School Efforts

One of the yet uncharted paths that businesses and schools are taking is for a corporation to "adopt-a-school." Hardly a week goes by without an announcement of a new venture somewhere along these lines.

In his recent study of corporation-school relationships, Michael Timpane interviewed corporate and school officials in large cities. Some of their efforts have tried to encompass all the

schools in a district. He found the largest achievements of such broad objectives in Dallas, Los Angeles, New Orleans, Memphis, and Oakland. He reports "transitory or indifferent" success in such cities as Minneapolis, Boston, and Chicago (but with renewed effort in Chicago). Within individual school districts in other cities he found individual instances of rigorous programs. Since his survey, substantial programs have spread in Washington, D.C. Corporations have now pledged $3 million to help the school system with career programs in high schools.

The D. C. Adopt-A-School Program was developed by the Prometheans Inc., a national organization of World War II veterans who studied at Howard University, and the program has now been turned over to the school system for its day-to-day operation. In Blue Print for Partnerships, there are two primary goals stated: "While the broad purpose of any Adopt-A-School program is to strengthen public education through the use of community resources, the specific and very strong focus of the Prometheans' program in Washington is career awareness . . . . Better attendance is another important objective of the program."[2/] At this writing, 52 employers are involved with 72 schools.[3/]

An evaluation of the Adopt-A-School program in Baltimore was published in 1978. The authors state that the Baltimore program

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2/ Blue Print for Partnerships: A Process Guide for Organizing Adopt-A-School Programs, Adopt-A-School Program, Washington, D.C. (undated).

3/ Telephone conversation with Ms. Susan Morgan, D.C. Public Schools.

"is unstandardized. There is no fixed curriculum to be pursued, although any business-school pairing that chooses to do so can devise a curriculum to suit its purposes, or choose from among curricular materials that are commercially available. The freedom to plan a program based solely on the needs of a given group of young people and on the kind of expertise that a given firm can contribute is at one and the same time the major strength of the ASP as well as a potential defect." The final conclusion is that "the freedom was a basis of productive choices for all but a few pairings."[4/]

As extensive as these programs have become, there is no central source of information about them, how many there are, what they do, and with what results. A clearinghouse of information could make a large contribution to the effectiveness and spread of these efforts.

Other Forms of Help

Harking back to the days when schools incorporated business practices in their management, there are new ventures by corporations in helping schools on this front (and some not so new).

The Economic Development Corporation in New York City has long been helping schools with management. It has gone so far as to have loaned business personnel outstationed in schools, helping on a day-to-day basis.

4/ Baltimore's Adopt-A-School Program: A Fruitful Alliance of Business and Schools, Otto F. Kraushaar and Sandra R. Minkin, Baltimore, Maryland, July 1978.

Chicago United formed a task force of 85 loaned executives to provide four months of analysis of the school system's management of instruction. The value of this free consulting was $2-3 million. Michael Timpane remarks: "It was clearly the view of the task force's founders that the long term financial health of the system was the fundamental interest being advanced by this study. Educational management needed improvement for its own sake to be sure, but also for the system to retrieve the confidence of the legislature and taxpayers, in order ultimately to receive the monies for financial survival."

In Los Angeles, the Chamber of Commerce commissioned an economic analysis of the school system's financial needs. In Minneapolis the business community raised $100,000 for a comprehensive planning process with an objective of intensifying community-wide participation in the development of educational policy. In Dallas and Pittsburgh business has aided public information programs in making the schools' case to the community. In Seattle the business community was instrumental in developing and implementing a voluntary, comprehensive desegregation plan (these examples are drawn from Timpane's study).

Another variation of help is reported by Timpane: the few instances of pooled funding in aid of public education. The San Francisco Educational Fund makes grants for classroom programs. The Allegheny Conference on Economic Redevelopment provides mini-grants to almost 100 Pittsburgh teachers who are innovative.

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Corporate involvement in public education does not run wide or deep, but it is growing. Corporate attention to education is for the most part focused on colleges, for that is where the larger firms find their developed talent. It is hard to tell at the present whether corporate involvement will remain essentially peripheral, or whether the new concern with quality and standards will cause corporations to reach further out to the schools with assistance and support dollars to help, in business parlance, "turn around" the public education enterprise that is under growing attack.

2. COLLABORATIVE COUNCILS

During the last decade we have seen the establishment and growth of "collaborative councils" at the local level. This is a generic name for local collaborative efforts that have many names, the most common of which are Education-Work Council (or Work-Education Council) and Industry-Education-Labor Council (or just Industry-Education Council).

While their sources are diverse, one major stimulus to their creation was the publication of The Boundless Resource in 1975, and the subsequent pilot project run by the National Institute for Work and Learning (NIWL, then the National Manpower Institute).[5/] The principal recommendation of that book, after extensive analysis of the transition from school to work was:

> That there be established, in at least twenty-five cities, Community Education-Work Councils through which school officials, employers, members of labor unions, and members of the public engage collaboratively in developing and administering education-work programs; and that these pilot projects be carefully evaluated, over a five-year period and on a comparative basis, to determine their practicality and effectiveness.

That pilot program was carried out from 1976 to 1979.

Another source of inspiration for collaborative councils was the National Association For Industry-Education Cooperation (NAIEC), incorporated in 1972. Its origins, however, go all the way back to 1950 with the formation of an Industry-Science Teaching

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5/ Willard Wirtz and the National Manpower Institute, The Boundless Resource, A Prospectus For an Education/Work Policy, New Republic Book Company, Inc., 1975.

Relations Section of the National Science Teachers Association. While NIWL and NAIEC define their objectives somewhat differently, I believe that the councils that bear the title Education-Work or Industry-Education-Labor are not essentially different in their operations, and that there is more variation among councils with the same names than there is between those that bear one name or the other.[6/]

The most recent and authoritative statements about the nature of these councils, and the extent and quality of the practice, are to be found in the publications of the Industry-Education-Labor Collaboration project of the National Institute for Work and Learning, carried out under the direction of Gerard Gold.[7/] Gold's definition of a council is extensive. The key elements are: "Council membership is <u>representative</u> of major sectors in a community; collaborative mechanisms are intended to join and serve the interests of <u>more than two sectors</u>. Councils should be designed to treat education, industry/business, labor, government, and youth service institutions as equal partners. . . . . Collaborative councils are <u>performance oriented</u>. . . . . Most crucially, council members and the institutions they represent <u>share responsibility</u> for implementing the action agenda that brought them

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6/ I should say, however, that not all agree with this statement; Donald Clark, of NAIEC has expressed the view that they do differ.

7/ These publications are (all with the prefix <u>Industry-Education-Labor Collaboration</u>): <u>An Action Guide for Collaborative Councils</u>, 1981; <u>The Literature of Collaborative Councils</u>, 1981; <u>A Directory of Collaborative Councils</u>, 1981; <u>Policies and Practices in Perspective</u>, 1982. They are available from NIWL, 1302 18th Street, N.W., Washington, D.C. 20036.

together in the first place." The report provided here is drawn almost entirely from Gold's project.

Applying this definition, Gold created a directory of 154 councils, and the directory provides a profile of each of them (the information was collected two years ago; there have been "births and deaths," and the activities of many may have changed).

In short, these collaborative councils bring industry, education, labor, voluntary service organizations, and local government together to work jointly for smoothing the transition from school to work and improving the education enterprise. Most are relatively new partnership efforts. Gold states: "This directory of over 150 local collaborative councils could not have been compiled just five years ago when only a few of these organizations would have existed. That they exist and thrive now is a tangible sign of a new wave of enthusiasm for business and labor cooperation and alliances with education institutions throughout the nation."

What do these councils do? The answer is a lot of different things. Much of their activity is acting as brokers to get other institutions to change or initiate new activities. They also carry out programs themselves, through the typically small staffs that work under the direction of the council membership. Gold has tabulated the kinds of activities councils engage in (in Policies and Practices in Perspective).

Most Common Council Projects

	Number of Councils
In-service teacher workshops on career development topics	52
Career speakers in classrooms	45
Community resource clearinghouse and/or directory	36
Career days and career fairs	35
Coordination of school and non-school programs (especially school and local government youth training programs)	35
Job fair and/or job placement assistance for youths	34
Improving career counseling and information services	33
Site visits for students to employers	29
Improving vocational education programs	27
Shadowing programs for students at work site	22
Public relations on career-related topics	22
Establishing school-business partnerships and adopt-a-school programs	18
Site visits for teachers to employers	17
Needs assessmen	17
Curriculum development	16
Economic development	16
Inventory community resources	15
Newsletter	14
Assisting special needs youth	14
Developing programs for adults	14

A few brief descriptions of councils are provided below as illustrations:

- Arizona Business-Industry-Education Council, Inc., Phoenix, Arizona

This is a long established council, which started in 1960. The 33-member board of directors sets policy. An executive board of about 60 representatives of firms provides financial support and policy input. A 10-member education advisory board advises the vice president.

- Charleston Trident Work-Education Council, Charleston, South Carolina

Organized in 1977, membership is limited to 50. A five-member executive committee, composed of a chairperson and four vice-chairpersons for projects, finance, membership, and community relations, provides over-all direction. Special task forces plan, develop, and review specific projects.

- Sioux Falls Area Education-Work Council, Sioux Falls, South Dakota

Formally established in 1977, the council has fifteen members. In 1980 it became an ancillary corporation of the Center for Community Organization and Area Development.

- Santa Clara County Industry-Education Council, San Jose, California

Formed in 1978, the council is governed by a 21-member executive board. The board members are representatives of institutions; there are no individual members. The board develops task forces to plan and implement specific projects.

- Community Career Development Council, Corning, New York

Incorporated in 1977, membership includes representatives from labor, industry, business, academic schools, vocational schools, BOCES, the Chamber of Commerce, and county government.

The collaborative council movement is a young one, and represents a means of giving both continuity and coherence to partnerships among industry, education, labor, and other agencies.

The staying power of these councils is largely untested, since a great many have been recently organized. A few, however, have been going a long time. These councils represent the most comprehensive of local efforts, and perhaps the most ambitious.

3. TRANSITIONS TO WORK

While distinctions among various partnership arrangements are not all neat and clear, there is one category not covered elsewhere in this paper. These are joint programs to help youth move from school to jobs, or get brush-up job skills, or get job search instruction, or counseling, or a more modern curriculum, or work experience, or all of these. Typically, these programs focus on minorities and other disadvantaged youth, although not all are that narrowly focused. (The collaborative councils do some of this too, but primarily they provide a process for getting things done; they are not themselves programs.)

The partnerships referred to here are those that have generally received the most public attention. For example, Jobs for America's Graduates and 7001, Ltd. are well known in circles where employer-school partnerships are discussed. Programs such as these provide the material for newsletters that describe programs for the disadvantaged (You and Youth and the National Alliance of Business Showcase, for example). They are also the programs that have been the subject of recent books of short case studies. One is The Private Sector Youth Connection, Volume 1: School to Work, by Henrietta Schilit and Richard Lacey, published by the Vocational Foundation, Inc., in 1982. Another is Let's Not Reinvent the Wheel: Profiles of School/Business Collaboration, edited by Ian McNett and published by the Institute for Educational Leadership, also in 1982. And the National Alliance of Business Clearinghouse is a rich source of information on employer-school programs for the

disadvantaged. Yet another is Review of the Literature: Expanded Private Sector Involvement, written by Max Elsman at the National Institute for Work and Learning for Youthwork, Inc. in 1980.

With all this attention and a number of quality publications available, it would not be useful to provide expanded descriptions of these many programs in this paper. However, for completeness, they need to be included, and some examples will be provided to convey the general nature of these efforts on behalf of the disadvantaged (although they have significant differences in approaches). The lessons learned from these programs are also the subject of another paper commissioned by the National Commission for Employment Policy, written by Richard Lacey.

Jobs for America's Graduates (JAG) is relatively new as a national effort, and first known as Jobs for Delaware's Graduates (JDG) where it was developed. JAG now has expanded to Arizona, Missouri, Massachusetts, Virginia, and Tennessee. The focus of these programs is on high school seniors who are not college bound (and is therefore broader than programs dealing only with disadvantaged youth). Employers play key roles, and employer personnel are brought into the schools in the design and administration of the program. As Ian McNett describes JDG, the program "helps young people develop employment skills, recommends remedial math and reading when necessary, helps motivate students, and trains them for leadership through participation in a Student Career Association." This association is modeled on the many "clubs" in vocational education, such as Distributive Education Clubs of America, and provides a means of peer support, follow-up, and motivation. The

Delaware program operates in 24 high schools, and is reported by McNett to have a placement rate of 87 percent, at an average cost of $1,500 per student.

70001, Ltd., founded by the Thom McAn Shoe Company, is a national program with a target group of school dropouts and young public assistance recipients. As described by Max Elsman, "A unique aspect of 70001 is its 'franchise' concept. Local CETA or education agencies interested in starting a 70001 program contract with the organization's national headquarters. . . . 70001 then subcontracts with the sponsoring/operating agency to franchise the use of the 70001, Ltd. name, instructional materials, training services, youth organization activities and so on. . . . Employers must agree in writing to see that enrollees receive 'special concern' and to evaluate enrollees' work." Although there are a number of different kinds of sponsors, the ones we are here interested in are the schools. Currently, there are at least five school-based programs that have partnerships with employers: in Wilmington, Delaware; Boise, Idaho; Minneapolis, Minnesota; Spartanburg, South Carolina; and Knoxville, Tennessee (at the University of Tennessee). Recent evaluations of performance are available.

The Philadelphia High School Academies were the joint creation of the school system and industry. According to Ian McNett's report, "Each Philadelphia academy program offers actual work experiences to students, starting in the 10th grade, who are interested in vocational education, and a strong linkage between work and education. The program serves primarily a black, inner city, poor student population. The Electrical Academy operates a

shop which is run by students and which contracts with businesses for sale of its products and services. In addition, students at this and other academies seek part-and full-time work after school or during the summer. . . . All the programs stress acquisition of entry level skills required to seek gainful employment. . . . Provisions are made for students to take some courses outside the academy to meet state requirements for graduation." In addition to the Electrical Academy, there is an Automotive Academy and a Business Academy (where six teachers teach business education, English, and mathematics).

The Murray Bergtraum High School for Business Careers is the result of a joint effort begun in 1975 between the public school system and New York City's Lower Manhattan Business Community. The Downtown Lower Manhattan Association formed a task force of chief executive officers. According to Schilit and Lacey they were "to identify future needs of local business and assign executives from their companies to plan curricula with educators from the Board of Education. . . . Interested company volunteers participated throughout planning and start-up. They identified business needs that the school programs might best address. Professional educators translated these priorities into specific subjects, courses, and requirements." Murray Bergtraum is a "magnet school" with 2,500 students from all five city boroughs.

The Raytheon Data System's teacher internship program led to a sophisticated computer skills curriculum in four high schools in Norwood, Massachusetts. Each school is using $80,000 worth of equipment donated by Raytheon, and the firm helps the teachers with

implementation. Co-op work assignments at Raytheon help students prepare for entry-level jobs.

These are only a handful of examples of partnerships in which employers and schools join in a wide variety of endeavors to improve the links between school and work, for the disadvantaged, and for a broader sector of high school students as well. A large number of such partnerships has now been documented in the publications listed at the outset of this section; they provide a rich source of examples for employers and schools seeking new ways to work together. The problem is that a review of these partnership programs is not available all in one place.

4. COOPERATIVE EDUCATION

The oldest form of partnership between business and education is probably cooperative education. It has grown over the years, more slowly at the secondary level (but with about a half million enrollments) and almost explosively at the community college level.

According to James W. Wilson, the first program was inspired by a University of Cincinnati engineering professor, who brought the idea with him from Lehigh University in 1903 and started a program at Cincinnati in 1906, after he had risen to be dean. Dean Schneider found in cooperative education the solution to two problems, and his diagnosis has well stood the test of time:

> First he had noted that many elements of most professions could not be taught effectively or at all in the classroom but rather required practical experience for their adequate mastery. Second, he had found that most students either needed or wanted to work sometime during their college careers; most of these jobs, he further observed, were menial and unrelated to the students' career goals. By means of his cooperative education plan Dean Schneider found a way of satisfying the needs of students for 'state of the art' experiences and for money.8/

The need to inter-relate classroom work with experience has continued to be the objective of the many current programs; the desire of students for jobs and experience has continued to be a motivating force for students who choose this approach. The "overview" nature of this paper precludes doing justice to this long established system, but it is important to note here that it is the

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8/ James W. Wilson, in Handbook of Cooperative Education, Asa S. Knowles & Associates, Jossey-Bass, 1971.

most enduring of joint efforts between employers and schools in the education enterprise. There are a number of experts in education who have made it their business to follow this approach over a large number of years, and any serious review of the possibilities of furthering partnerships must come to grips with the vast experience that has built up over the decades.

Like any field of education, there are outstanding programs and there are those that have deteriorated. Cooperative education needs clearly defined goals and responsibilities for participating employers, schools, and students. The employer has the responsibility of providing work stations and on-the-job instruction that dovetails with the occupational objective of the school and the student. The school must have "coordinators" who watch over the participating students while they are out of the classroom, help arrange with employers for sufficient opportunities, and help mesh experience and classroom learning. Cooperative education demands more personnel in the school budget; on the other hand the use of employers' equipment for learning lessens the need for expensive equipment in the classroom.

In a time when vocational education struggles to keep its offerings closely related to an economy that is constantly changing the shape of occupations, with some declining and some expanding, cooperative education provides a discipline that keeps offerings relevant. That discipline comes from the simple fact that employment experiences must be found in the free market, and employers are not going to continue in programs in which they see no employment opportunities in their firms.

A principal test of the success of vocational education has been the percentage of graduates placed in jobs for which they have been prepared; cooperative education has a built-in capability for meeting this test. In well-run programs the overwhelming majority of placements are made in the firms participating in the program.

Just a few miles from Cincinnati there is another early entrant into cooperative education. With employers heavily involved and a motivating force, Dayton, Ohio established a whole high school on the co-op principle in 1914, several years before the federal vocational education act came into being. The major employers in Dayton still expect to draw a substantial portion of their trained new entrants from Dayton's Patterson High School, where students alternate school for six weeks and work for six weeks, going the year round except for a two-week vacation. The school serves double the number of students it would under a straight classroom approach. It has holding power, and keeps its students until graduation.9/

Another example of a city that uses cooperative education extensively at the secondary level is Cleveland, Ohio, reported on recently by David Bushnell. According to Bushnell the Cleveland program "enrolls over 13,000 students in five major vocational education areas (trade and industry, horticulture, home economics, business, and distributive education programs). All students are supervised by a cooperative education coordinator who is responsible for insuring that the work opportunity provided by an employer

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9/ I visited Patterson High some years ago and asked about dropouts. The principal thought a while, and came up with one name.

relates directly to the occupational training the student is receiving in school. In Cleveland, 70% of the students . . . are subsequently employed by the company for whom they worked. Even if a student becomes a full-time employee, the cooperative work experience station remains open for another student to step into, thus keeping the training opportunity open year after year."[10/]

One of the most well known cooperative education programs is in distributive education, and these programs exist in a substantial portion of high schools across the nation. The program is bolstered by student clubs organized by Distributive Education Clubs of America. The extent of such programs varies with the school, the state, and the locality.

There are two problems in these joint ventures in the case of high school students. Where quality standards are not maintained the students can end up in menial jobs that provide little training, for there are temptations for the employers to use students in low skill jobs at the minimum wage (in union plants, however, and in others as well, co-op students are paid prevailing wages). Another problem is that recessions make it very hard to maintain the needed level of work stations, and many a co-op program has been hampered by the business cycle. Employers are in co-op education because they believe the approach has advantages for meeting their skill needs; there are limits to what they can do when employment levels

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10/ David S. Bushnell, The Role of Vocational Education in Economic Development, 1980. Funded by the Department of Education, this study was part of a larger project carried out by the American Vocational Association.

are shrinking. On the cost side, the Targeted Jobs Tax Credit was a stimulus to these joint undertakings because the substantial tax credit for wages paid to co-op students reduced the cost of participating in these programs; however, co-op students' wages are no longer eligible for these credits. Restoring this credit for employing co-op students would be one way to stimulate effective partnerships between corporations and schools.

In 1968, cooperative education was given the status of a separate title in the federal vocational education amendments of that year, and this status and funding has been a stimulus from the federal level. There is also modest funding of co-op programs in the Higher Education Act; community colleges account for the lion's share of recent growth.

But it is somewhat of a mystery that co-op programs have not become a larger factor in vocational education. Only $7.7 million of federal grants for instructional programs out of $385.5 million goes for co-op programs, and only $97.1 million of state and local expenditures out of a total of about $4.5 billion goes for these programs. From all resources combined, just 2.2 percent goes to cooperative education.[11/] There is large room for expansion of this partnership approach in the vocational education system. Expanding the cooperative approach would be a worthy objective for employers who want to see more relevance of instruction and more involvement from the employing community.

11/ From the National Institute of Education's Vocational Education Study, The Interim Report, Table VI-16. The data are for 1979.

5. VOCATIONAL EDUCATION

Public vocational education is a h' ge enterprise costing now about $7.3 billion in local, state, and federal funds. It has the most extensive set of relationships between schools and businesses of any educational system in the United States. The strength and usefulness of vocational education depends on just how close these relationships are. We can say with some certainty that the quality of these relationships varies from excellent to poor; it is much harder to try to describe them in qualitative than quantitative terms. It has also proved difficult to find any central source of information about the types of relationships, buttressed by examples of good practice to illustrate the content these relationships have, and to serve as models for practitioners to choose from.

While this separate section is devoted to "vocational education," other sections of this paper also address relationships in this system. Cooperative education, for example, is vocational education. A great deal of the leadership and training that is tied to economic development, also discussed in a separate section, is vocational education. Some of the partnerships in the section called "Transitions to Work" would be included in the definition of vocational education, and be carried out with the involvement of vocational education systems. Here, I try to capture the kinds of relationships with industry that go on day in and day out in regular classroom vocational education, or that are on the cutting edge of collaborative efforts.

Rupert Evans makes the point well, that there must be close relationships: "Industrial education and industry cannot operate effectively without each other. If either is weak, the other suffers. If they fail to communicate with and assist each other, both suffer. If both are strong and are designed to help each other, the results are mutually beneficial."[12/] Evans calls for a "mutually symbiotic relationship." Recently, Gene Bottoms, Executive Director of the American Vocational Association, announced that AVA was making collaboration with industry a high priority, developing a five year plan for strengthening it, devoting the next convention to that subject, and devoting the next AVA Yearbook to collaboration.

The most pervasive form of industry involvement in vocational education is in the advisory committees composed of representatives of the crafts and occupations taught in the classroom. A book published in 1945 called these advisory councils "a relatively recent trend."[13/] The author noted that as a result of the urging of the U.S. Office of Education, more than 1,500 councils were in operation at that time. Ralph Wenrich reports that by 1950, three states had passed laws requiring the use of local advisory committees, and that well over half recommended their use.[14/] The 1968 federal vocational education amendments required national and state

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12/ Rupert N. Evans, "Symbiosis and Parasitism--Perspective for Industrial Educators," School Shop, April 1983.

13/ Theodore F. Struck, Vocational Education for a Changing World, 1945.

14/ Ralph C. Wenrich, "Linkages with Industry," School Shop, April 1983.

advisory committees. According to Wenrich, while an abundance of literature discusses the use of advisory committees, there has been little research to determine their effectiveness.

In any event, the number of advisory committees grew and grew. Recently, Robert M. Worthington, Assistant Secretary of Education, said, "Although we do not have a firm count, it is likely that the number of craft committees and other advisory bodies that include business-industry representatives ranges between 30,000 and 40,000.[15/] If the committees have an average of ten members, then from 300,000 to 400,000 business/industry people are involved in the vocational education enterprise."

While there is not, to my knowledge, an organized body of information on all the collaborative modes in vocational education, some of the types can at least be illustrated.

One serious problem for classroom vocational education is keeping the equipment up to date. With technological advance, this is an ever increasing problem. It was recently described this way by G. William Dudley, Director of the South Carolina TEC Program:

> Finding the funds to buy the types of sophisticated equipment needed today can be troublesome. The first time you talk to a prospect he may be interested in x product, but when you see him a year later, he is talking about y because x is antiquated. Things are changing so fast. Before we were talking about buying a lathe for $3,000. Now it's computer graphics--that's what we have to deal with.[16/]

15/ Robert M. Worthington, "Linkage Patterns Are Taking Shape in the U.S. Department of Education," School Shop, April 1983.

16/ William G. Dudley, Employee Training for Productivity, Report of a Wingspread Conference.

The Milwaukee Area Technical College (MATC) is collaborating with industry to secure such expensive equipment. The Allen-Bradley Company is dramatically increasing its computer-assisted design and production operations and needs supplementary training from MATC, and since 1980 MATC has introduced 11 new computer graphics programs. Says the program head Peter Jushka, "Naturally, a huge cost is involved in all this, and MATC could not have done it without support from its industry partners. The high cost of advanced technology demands a linkup of industry and education. MATC is seeking contributions to help pay for equipment and Allen-Bradley is among those who have responded."[17/]

Another example of a serious equipment problem was encountered by a teacher at Rogers High School in Rogers, Arkansas. The teacher, Fran Williams, asks: "Have you ever tried to teach a data processing course without the use of a computer?" She tried, and then went to the computer manager at Daisy Manufacturing Company for advice. He suggested getting industry people together, and in 1979 the first meeting of the Electronic Data Processing Advisory Committee (EDPAC) was held. At that time Rogers High had one donated teletype terminal on-line with the University of Arkansas. With the help of EDPAC, Rogers now has 10 computers and offers four introductory and one advanced data processing course, with another planned in computer accounting. Fran Williams offers ten tips on how to duplicate the Rogers High experience, one of which is "keeping our

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17/ Quoted by Don Rich in "Partnerships Take a New Turn," VocEd, May 1983.

contributors and would-be contributors up to date by letter, telephone and in person concerning the changes in the Rogers' Computer Program."[18/]

Another example is broader than equipment, but includes it. About three and a half years ago General Motors' relationship with schools took a new turn, reports B. E. Grosse, Director of GM's Product Service Training. GM had launched a pilot called the Automotive Service Education Program at Delta College, near Midland, Michigan, a two-year degree program for entry-level automotive service students working on a cooperative basis with GM dealers. Substantial amounts of equipment were donated to the school. An important component met another school need, for GM also helped train the school instructors on the latest GM products. The model was then installed at Brookhaven College in Dallas, Texas and at Triton College in Chicago. By 1982, three additional schools had programs: Northern Virginia Community College near Washington, D.C., Ceritos near Los Angeles, and DeKalb County in Georgia. More joint programs are planned. Says Grosse: "Looking back at the almost two years' experience, the initial confidence in the community college capabilities and system has been born out. The results have been superb."[19/]

Another example of a partnership that involves both equipment and help in instructor training is the Minicomputer Technology

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18/ Fran Williams, "From One Computer to Ten in Four Years," VocEd, January/February 1983.

19/ B. E. Grosse, "GM Maintains Hi-Speed Hi-Tech Transfer with Automotive Educators," School Shop, April 1983.

Program (MTP), sponsored by the Digital Equipment Corporation. Reports Patrick A. Cataldo, Jr. of Digital: "Digital makes available to participating schools state-of-the art equipment, training facilities, documents, curricula, materials, instructor aids, and professional counselling."[20/] Operating now for six years, the program has agreements with 25 non-proprietary public and two-year colleges and technical institutes. A scholarship program has also been started for women and minorities.

Industry help in keeping teachers up to date is also essential to vocational education. One example is the need of business education departments. Annette J. Thomason reports the comments of one instructor at Utah Technical College at Provo: "I haven't been in an office for ten years, and things have changed a lot." The Professional Business Teacher Internship (PBTI) program is designed to remedy this. Begun in 1981-82, the program helps teachers keep pace by giving them hands-on experience in some of the most modern offices in the state. It operates with the help of an industry steering committee, and along the lines of the co-op model.[21/]

Guidance counselors also need to "get inside" industry in order to have the latest information about the workplace and how jobs are changing. One of the largest such efforts is the General Electric Educators in Industry program operating in over 20 cities where GE has facilities. High school guidance counselors are

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20/ NAIEC Newsletter, January/February 1983.

21/ Annette J. Thomason, "Teacher-Interns Update Skills," VocEd, May 1983.

brought into GE facilities to "shadow" employees. Arrangements are made with a local university for supplementary instruction, and credit is awarded by the university.

Keeping offerings and curricula up to date with changing technology is a never-ending struggle for vocational education. One recent attempt to bridge this gap between industry and schools is the Technology Exchange Center (TEC) in Orange County, New York. The Center was the product of an extensive period of collaboration between representatives of the hi-tech companies and the community college system in Orange County. Reports Kathy Lusk, the coordinator during the planning period:

> The primary purpose of the Technology Exchange Center is to address these pressing employment and training needs in Orange County with a collaborative approach, seeking answers to common issues which cannot be resolved in isolation. . . . TEC's plans call for it to become a non-profit corporation supported by membership and user fees, while pursuing four main goals.[22/]

These goals are (1) to serve as a clearinghouse to cut across boundaries in order to develop training programs that will meet immediate needs; (2) to promote and coordinate training resources throughout the county for expanding industries, new industries, and existing industries in need of staff upgrading and retraining; (3) to provide information to assist planners in making recommendations concerning the development, modification, or deletion of programs; and (4) to coordinate the upgrading and training of displaced workers for high-demand jobs. Bill Turner, personnel

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22/ Kathy Lusk, "Orange County's TEC Center," VocEd, May 1983.

administrator for Northrop, has played a key role in the initial direction of the Center.

Another comprehensive effort at collaboration with business is the Boston Compact. The Compact, report James Caradonio and William Spring, "is a written agreement between the school system and the business community. Under its terms, the business community agrees to hire 400 June 1983 high school graduates in permanent jobs and to expand that number to 1,000 within two years, provided that the schools prepare young people for these jobs and implement a system-wide effort to improve the high schools.[23/] Under the Compact, the whole secondary school system is focusing on job readiness and employability skills for all students, although employers are thinking of more than just entry-level skills; they are looking for employees who can also advance rapidly in their firms. To bring this about there are 15 work groups, with the key ones being in basic skills, alternative education, electronic learning, career and vocational education, curriculum planning, and counseling for post-secondary education. The Compact includes, but is broader than, vocational education.

While "industrial arts" is a separate branch of education below the high school level, it is related to vocational education. One significant development will be reported here. A National Industrial Arts Advisory Committee has been created to advise the American Industrial Arts Association. The committee includes

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23/ James Caradonio and William Spring, "The Boston Compact," VocEd, April 1983.

representatives of the communications, construction, manufacturing, and energy technologies, as well as educators. Louis Godla states: "The recommendations of this committee will have significant impact on programs and individuals if they are heeded and they find their way down to the classroom level."[24/]

No discussion of vocational education can be complete without some discussion of the several systems of student clubs that are vital to the way vocational education operates. They include Future Farmers of America, Distributive Education Clubs of America, and Vocational Industrial Clubs of America. One huge enterprise in industry-school partnerships i the United States Skill Olympics held annually at the local, state, and national levels by the Vocational Industrial Clubs of America, the last national competition taking place in Louisville, Kentucky in June of 1983. The skills competition is the result of a partnership among industrial firms, vocational schools, organized labor, and VICA. The industrial sponsors contribute most of the $6.5 million needed to make the olympics possible. Technical committees (composed of industry representatives) develop the contest in each occupational area and determine performance objectives. The standards and skill tasks are based on the requirements of entry-level jobs, not on the courses learned in school. Participation in these contests by industry motivates students, as well as bringing industry and education closer together on what course content should be.

24/ Louis Godla, "Talk Linkage with Industrial Arts: You Better, That's Where it All Begins," School Shop, April 1983.

6. EXPERIENCE-BASED CAREER EDUCATION (EBCE)

Experience-Based Career Education is perhaps the most recent innovation in secondary school curriculum. In 1975 the National Association of School Principals reported on it in the following way:[25/]

> If you were a 12th grader in Tigard, Oregon, and enrolled in an alternative study plan called Community Experiences for Career Education--abbreviated $(CE)_2$ --these are the graduation requirements you would be working to satisfy in order to qualify for a Tigard High School diploma:
>
> - Life Skills: Each student must complete two projects per program year in each of the Life Skills areas. . . .
>
> - Competencies: All seniors must complete at least seven of the 13 competencies. Students who enter as juniors must complete all of the competencies by the end of two years.
>
> - Basic Skills: All student projects must include fundamental and applied skill activities in reading, mathematics, communication.
>
> - Employer Learning Sites: Each student must complete at least five exploration level placements per program year. In addition, each student must spend two-thirds of a program year on learning level placements.

The program reported on was one of four Experience-Based Career Education Projects being developed by four laboratories funded by the National Institute of Education. It is reported in this paper because it requires a partnership with business and industry, as well as with other community organizations, to make it

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25/ Curriculum Report, National Association of Secondary School Principals, February 1975.

work. Its uniqueness lies in the extent to which the program tries to integrate experience and education in the high school years. While cooperative education also does this, EBCE builds to a greater extent on a variety of employment and community experiences for the purpose of advancing learning and life skills, and uses employer sites less than cooperative education for the pursuit of training in a particular occupation. In EBCE, the employer side is a part of education, and wages are not paid, as they generally are in cooperative education.

The unfolding of EBCE and its spread to 156 school districts (down from a peak of 250 districts) is a remarkable story, for it follows what a good text book might say about innovation and its implementation. Four educational laboratories were under contract to develop the approach, which had initially been conceptualized on the basis of work of several thinkers in the educational world. The labs were to further develop the concept and run model programs in the school systems. The models underwent a "formative evaluation," using control groups, to identify needed adjustments in the model and to see if basic objectives were being met.

The evaluation was conducted during the 1974-1975 school year.[26/] The first area for evaluation was whether the program received community and parental support. This support was found to be broad and deep. The second area for evaluation was academic

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26/ The results reported here are from Ronald B. Bucknam, "The Impact of EBCE--An Evaluator's Viewpoint," Illinois Career Education Journal, Volume 33, Number 3, Spring 1976.

quality. The EBCE program had set, as a condition for introducing so much on-site experience into the school day, the objective that students not be hurt academically by the program, especially in reading and mathematics. The conclusion was that "the evidence shows the hypothesis (that the students would not be academically hurt by being in the program) is substantially upheld." The third area was "programmatic outcomes," and the evaluation found the EBCE students to be better in oral communication skills, had better attitudes toward the school environment, and dropped out of school less.

After the evaluation, the National Institute of Education (NIE) set out to get the model introduced into a large number of school systems, using NIE money; NIE now puts no money into EBCE and local funding has risen to about $35 million per year. As the number of schools installing the model grew steadily, an ever increasing number of employer sites were being used, and a large number of resource persons became parties to the educational enterprise. Employers had shown their support for the system in the 1974-75 evaluation: "Less than 6% of the employers indicated that they could not continue in the program for another school year. Over 95% indicated that their organization either was better off or had not been adversely affected by their participation in EBCE. Employers said that they had gained in community relations, improved staff morale, lowered in-service training costs, and increased community awareness on the part of their employees. Finally, 96% of the employers said that they would recommend participation in EBCE

to other employers."[27/]

In 1981, NIE summed up the EBCE experience: The "growth has been accomplished without specific federal legislation or regulations supporting the use of the proven EBCE programs. That is, there has been no EBCE categorical aid and what has been done has been done by local educators in their efforts to resolve local educational problems, with small amounts of NIE supported technical and organizational assistance. A professional organization called the National Experience-Based Career Education Association has been formed by local and state EBCE practitioners and community members.[28/]

As EBCE grew it also continued to be evaluated, a not too common occurrence. The fact that a research agency (NIE) was in charge of the program's dissemination is undoubtedly the reason for this remarkable development. There have now been 80 evaluations of individual programs. Comparable elements have been combined into one large study, using the meta-analysis technique developed by Gene Glass. The gains found in the 1974-75 evaluation of the early models were also found in the combined 80 evaluations. There was one striking difference: the EBCE students outperformed their counterparts in the control groups in academics. Whereas EBCE designers had posited there would be no academic losses from the diversion of time from the classroom to experience-based learning there were, in fact, gains. The authors report that "there were 420

27/ NIE program description dated February 1981.

28/ Ibid.

separate test administrations in the 80 programs that compared the progress of EBCE students with other students in their schools. In these administrations there were about three times as many significantly positive findings (104) as significant negative findings (35). . . . What these figures show is that EBCE students increased their achievement at much higher rates than the comparison students."[29/] The authors also reported that contrary to some predictions, students at all socio-economic levels from all types of residential areas profited from their EBCE experience.

EBCE is a curriculum that brings the worlds of experience and learning closer together. It requires an active partnership between the schools, the employers, and the larger community. EBCE has produced results, and those results include better academic performance as well as general life competencies. In this time of wide publicity about deterioration in the schools, and a growing number of commissions demanding quality improvements in the schools, EBCE merits closer examination.

29/ Ronald E. Bucknam and Sheara G. Brand, "A Meta-Analysis of Experience Based Career Education," Educational Leadership, March 1983.

7. PARTNERSHIPS FOR ECONOMIC DEVELOPMENT

Job training and occupational education offered by the vocational education system directly, or training paid for by a central state economic development agency has become a major tool to lure new business to an area and help old ones expand. This paper will describe partnerships where industry contracts with schools and pays for the training and also partnerships where schools pay industry to provide training. The unique thing about partnerships for economic development is that as far as money is concerned, industry is a silent partner. The state or local government pays for the training as an incentive for industry to move in or expand operations.

There is now substantial evidence that such training subsidies are a significant incentive. The evidence comes from both surveys to find out what factors are important to industry, and the growth results in states that have made free training a large part of their development effort. Among the studies of the factors important in industrial location is that conducted by the Bureau of the Census in 1973-1974, and published in 1976 with the title Industrial Location Determinants. This study analyzed over 560 factors influencing the location decisions of over 2,000 firms in 257 industries. Availability of public training programs was a "critical factor" in almost all of them.[30/] Another study was

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30/ Industrial Location Determinants, 1971-1975, U.S. Department of Commerce, February 1976.

carried out by the Industrial Development Research Council in 1977 and reported in The Industrial Facility Planners View of Special Incentives. The report was based on opinions of facility planners and real estate managers about which state and local business incentives were of most value to industry. Included in the top ten was "state-supported training of industrial employees."[31/]

While all states have some kind of effort to use training to spur economic development, they differ substantially in how much importance they attach to it, and how they go about providing it. David Bushnell, in a recent study of state and local practice, identifies three types of state approaches, (1) the Single State Agency Model, (2) the Multi-Agency Model, and (3) the Local Development Model.[32/] He points out, however, that there is substantial variation in approach within each basic model.

In the first model, the development programs are concentrated in one state agency. That agency coordinates the whole job, with other agencies such as vocational education lending assistance. People with vocational education backgrounds frequently serve as industrial training coordinators on the economic development team. Examples of the single agency approach are Alabama, Georgia, Louisiana, and North Carolina.

In the second model, the functions are shared by a number of agencies, but with vocational education having the principal

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31/ See Industrial Development, January/February 1980. The findings are reproduced in David S. Bushnell, The Role of Vocational Education in Economic Development, 1980.

32/ Bushnell, op cit.

assignment to deliver training services to industry; in fact state vocational agencies assume the central role in these states. Examples of this model are Iowa, Mississippi, Minnesota, Oklahoma, New Jersey, South Carolina, and Tennessee. According to Bushnell, "After an initial agreement with the client is negotiated, the vocational education coordinator, using state resources, assesses specific training needs, plans and develops curricula and training materials, and arranges for the programs to be conducted in an area vocational school, technical institute, community college, or other state or local facility convenient to the site of the new or expanding firm. Many states maintain state equipment pools, sometimes even mobile units, to supplement the local school resources."

In the third model, cities, counties, and communities use local and federal resources to create economic development programs. Bushnell reports that the local programs differ from the state programs in three respects. One is that a greater emphasis is placed on general community improvements to attract industry. Another is that local programs do not have the resources for major recruitment efforts, so they frequently concentrate on providing training to help existing businesses expand (Kansas City, Nashville, and Oklahoma City are examples). Yet another difference is that these local efforts draw most of their professionals from volunteers, rather than vocational education payrolls. Many of the volunteer coordinators come from public utilities, local banks, and transportation companies, all of which, Bushnell points out, have a stake in local growth.

State-level programs concentrate on attracting new industry, revitalizing existing industry, and expanding and diversifying a state's economic base. Community-level programs concentrate on providing customized industrial training services, small business management training, cooperative education, and self-employment training.

A few examples will better illustrate specific approaches in creating employer-school partnerships for economic development. These are drawn from 17 case studies conducted by the American Vocational Association's Vocational Education and Economic Development Project.[33/]

Louisiana

The state provides "start-up" training for new and expanding businesses, supervised by the assistant secretary of the Office of Commerce and Business, and conducted by a three-member team headed by a training director. Liaison with other agencies, including vocational education, is through representation on boards and advisory committees. The services offered to industry are through contractual arrangements with schools, industries, and private individuals. When a new or expanding industry needs training, the training director works out a tentative agreement with the firm, specifying the number of persons to be trained, the space, equipment, and personnel to be used. and the contribution (where

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33/ Krishan K. Paul, Ellen A. Carlos, and David S. Bushnell, Vocational Education and Economic Development Case Studies, American Vocational Association, January 1982.

there is one) to be made by the firm. Then the training director contracts with a qualified person to analyze the jobs and production processes used by the company. These processes are generally videotaped, and the consultant develops a program. The instructors are chosen from among company employees, and they are reimbursed by the Office of Commerce and Industry. In effect, this office becomes the "school." The training takes place on the job.

In Shreveport, the vocational education system plays a key role, where, under a contract with the state office, the system provides training for a General Motors truck and van assembly plant. To accomplish this training, a new facility was constructed at the Vocational Center campus, supplemented by classroom space in other buildings on the campus. The instructors are General Motors employees paid by the state. General Motors provides the instructional and operational supervision; the Vocational Center provides the administrative control.

Portland, Maine

In 1978 the Governor discovered that Pratt and Whitney (P&W) Aircraft Group of the United Technologies Corporation was deciding to build a new plant, and the Governor encouraged the Bureau of Vocational Education to offer the assistance that would help P&W to locate in Maine. The proposed arrangement was successful. The principal organizations involved were the Maine Job Service, the P&W personnel office, and the Bureau of Vocation Education's training project. There were 17 additional organizations

involved in funding and in operations.[34/] While P&W renovated and equipped an unused plant in southern Maine for training, interim training began on the Southern Maine Vocational and Technical Institute (SMVTI) campus, offering classroom space and the school's machine shops. When that equipment proved inadequate, SMVTI renovated two buildings for a skills center; at completion of the training the buildings were to revert to SMVTI. Suitable equipment was obtained through the Defense Industrial Plant Equipment Center, and instructors were obtained from the pool of applicants to the plant. P&W hired the trainees, and the starting date for each cycle was planned so as to have the trainees ready when the production line was ready for them.

Westchester County, New York

The Westchester effort concentrates on the problem that more than 50 percent of small businesses fail within the first two years of operation. The Small Business Encouragement and Rescue Program was formed to develop a curriculum to meet small business needs and improve chances for successful operation. Operations are out of the Westchester Community College, the Putnam and Northern Westchester Board of Cooperative Educational Services (BOCES), and the State University of New York Educational Opportunity Center. The New York State Chamber of Commerce and the National Chamber in New York City provide the major business input.

34/ The possible complexity of such an operation is well illustrated in the Portland example. The AVA case study book (previously cited) details who these organizations were, and the specific role each played (see page 22 of Paul, et al.).

Funds are provided by state vocational education and state grants for Minority Business Rescue. More than 50 agencies contribute instructors, materials, or technical assistance. While evaluation was incomplete at the time AVA made the study, the preliminary results were that of 22 participating businesses surveyed, 91% reported an increase in business profits as a result of the program.

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Spurring economic development has resulted in some large and varied partnerships between schools, training agencies, economic development agencies, and corporations. It is a cooperative understanding that has been growing during the past decade. The AVA case studies, used for the above three examples, are a rich source of information about how these efforts have come into being, and how they are operated. Many of them represent large scale efforts to use schools and other training agencies and facilities to lure private enterprises, and to stimulate the expansion of existing ones. Obviously there are a lot of people in education, governors' offices, and private business who believe that assistance to industry is an important means of stimulating economic development. They are voting with real dollars, and with hard decisions about where to locate a new facility.

8. CONTRACTING OUT BY EDUCATION

Most of the recent intense interest on the part of post-secondary education in the training and education industry provides has been from a single perspective: How can that education be moved to the education institution, to the benefit of a school's budget in these times of declining education budgets? There is, however, a little known mini-movement in the opposite direction. There are community college-level programs where the college contracts training out to private industry, or in one notable case, to other education institutions as well.

The John Wood Community College (JWCC) in Quincy, Illinois has the most extensive contracting out arrangement of which I am aware. When John Wood was established in 1974 as the newest community college in Illinois, it was recognized that there was a wealth of education services already existing in the area. The capability of employers to provide training was also noted. So "given the variety and quality of postsecondary education in the area, duplication of programs and services at a new institution in a costly new physical plant was viewed as clearly wasteful and unnecessary."[35/] The reasoning seems eminently practical, if uncommon.

So JWCC contracts out all the training and education it can, with employers and with the entire existing school system. JWCC calls it the "common market system." Through an "educational

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35/ The Common Market Concept: Contracting For Community-Based Education Services, John Wood Community College.

services contract" John Wood purchases services at a set fee per credit hour. Educational services can include formal classroom instruction, counseling, advising, administrative support services, placement assistance, and total use of physical facilities, including libraries. Where there are no existing services, John Wood will provide them.

The newest program at John Wood Community College is Broadcast Electronics Technology Careers. This is a joint venture between JWCC and the Broadcast Products Division of the Harris Corporation. JWCC contracts with Harris for the technological training while JWCC provides the students with broad, general coursework and supportive services. For an Associate Degree the program has required courses in broadcast technology plus other degree requirements; a certificate is awarded to students taking only the required courses.

Another program of JWCC is called SPIRIT, for Specialized Programs in Retail and Industrial Technology. This program recognizes that there are situations where training is needed, but that there may be, at any point in time, only a few job openings--even just one. In SPIRIT, JWCC can work with an employer to develop a total training program for just one student, to meet the needs of one business. The employer is paid by JWCC to provide job-specific training, while the college provides appropriate support courses. An employer that needs a trained employee can contact the college or a prospective student can search for a willing employer.

John Wood is in a populated area. Bay de Noc Community

College is in Michigan's Upper Peninsula (Escanaba). The contracting out program there was begun in 1976.

It is the objective of the Bay de Noc program to contract out all the job training to local businesses. The clientele focus is on unemployed youth, displaced homemakers, adults, and others inadequately served through traditional programs. The approach springs from this kind of viewpoint:

> Correlating college career training programs with employment needs is not simple, and there is no reason to expect it to become so in an increasingly technological society. Career options are rapidly growing; outlooks indicate further job specialization and instructional costs are increasing while revenues are decreasing.[36/]

The originator of this model, Charles Gold, thought a contracting out system was an answer to these forbidding challenges.

Learning objectives are established and are agreed upon between the college and participating business and industry. The two parties then sign a contract under which the firm agrees to provide the instruction necessary to achieve the performance objectives. The training is monitored both by the participating firm and the college coordinator. The student is evaluated to see if the objectives have been met. Job placement is mostly with the participating employer, and placement rates are reported to run between 85 and 90 percent. Fifty-four firms are now participating.

The setting up of the Bay de Noc program was preceded by a survey of employers, which found that a considerable number of job

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36/ Charles L. Gold, Contracting with Business and Industry: Use Your Community Resources.

vacancies were not filled because no trained person was available, and the employer left the slot vacant in order to hire an unskilled worker. The employer, according to Charles Gold did not train because

> . . . training costs often exceeded a reasonable return on their investment. Minimum wage laws, unemployment insurance, and the high cost of fringe benefits all made on-the-job training an expensive proposition for the employer. Adding to the employer's dilemma, a substantial period of costly training was often followed by the discovery that the employee was unsuited for the job.

The college achieves its objective of providing the training and placement needed by its students by meeting this need of employers. The college provides classroom study on campus and standard support services to supplement the on-the-job training.

Over the years other colleges have learned about the Bay de Noc model, through workshops conducted at the college. North Central Michigan College, in Petoskey, has a program modeled on that of Bay de Noc, although it is considerably smaller. According to its president, the program enables an expansion of offerings where there are only a few job openings and creating an on-campus course would not be justified.[37/] Muskegon Community College, in Muskegon, Michigan, also is in the beginning stages of installing a similar program.[38/] According to Charles Gold, several additional colleges have some elements of the contract approach:

West Shore Community College, Scottville, Michigan

37/ Telephone conversation with President Alfred Shankland.

38/ Telephone conversation with Frank Marzak, Dean of Faculty.

- Delta College, University Center, Michigan
- The College of DuPage, Glen Ellyn, Illinois
- Spokane Community College, Spokane, Washington
- Northeast Iowa Technical College, Calmar, Iowa

I have not determined the extent of contracting out activities at these colleges.

As can be seen above, a variety of motivations are involved: the need to have a responsive, flexible occupational education system; a recognition that some employers are reluctant to train; the desire not to duplicate services where they already exist in the community; and the desire to have offerings for students in occupational areas where there are only a few openings each year, but where these jobs are nonetheless desired by the student.

9. INDUSTRY CONTRACTING WITH EDUCATION

It is generally thought that industry provides its education and training internally, and that is the prevalent practice. There is also increasingly a bemoaning of this internal approach by postsecondary education institutions, and a great many would like to see industry turn to them to provide the services. Higher education seems, all of a sudden, to be waking up to the enormity of industry's education enterprise, and looking with envy at the dollars spent on it.

While there have long been instances of corporations purchasing services from education institutions, this has not been a widespread practice. The push will have to come from the schools, and they will not get significant levels of funding from industry without a convincing case and prolonged effort.

There is a growing, if small, number of community colleges making the effort to provide contracted education and training services to industry. Some of these efforts go back ten years or more, but most are the product of the last three or four years. Fortunately, the American Association of Community and Junior Colleges (AACJC) surveyed its membership recently to find out how much such contracting there was, and which colleges had pursued contracting on an organized basis by establishing separate offices or programs. Fifteen colleges became the subject of case studies of their programs, and AACJC identified common approaches and common

problems.[39/]

Most all the centers established to develop contracting relationships in these fifteen colleges have full-time directors, and some employ several professionals. Many of these directors have had prior experience in business, and some think that such experience is a necessity in order to develop the required contacts and to work with employers.

Within the colleges, four of the centers are in the continuing education (or community services) departments, three are in the president's office, one is in the provost's office, and the rest are scattered elsewhere. Their budgets range from $17,000 per year to $300,000 (although these amounts do not necessarily include revenue from contracts). The initial funding comes from the colleges' general funds and it is expected that these funds will be recovered from contract revenue. In fact, there is the expectation that the contracting programs should make money for the colleges, and they are thought of as entrepreneurial ventures; they are run on a "strictly business" model.

Such colleges are located in rural, urban, and suburban areas, and they contract with a large variety of businesses. Frequently, these contracts are for a one-time program, and the courses taught tend to be short. The colleges vary considerably in the age and size of their programs, and the programs are of two

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39/ The results of this study are published in Community College Centers for Contracted Programs, by James R. Mahoney, American Association of Community and Junior Colleges, 1982. This section draws from his report.

types. "Special" programs are tailored for one firm, and "generic" programs are designed to be offered to several firms.

A brief description of a few programs is provided below; detailed descriptions and contact persons are contained in the AACJC study.

- The College of DuPage, Glen Ellyn, Illinois.

  The Business and Professional Institute was established in 1979 with a first-year budget of $208,270. Its revenues the first year were $197,270, and by the third year had risen to $431,361. In the three years it offered 183 special programs and 567 generic programs to 17,508 students.

- Portland Community College, Portland, Oregon.

  The Institute for Community Assistance was created in 1969 with a budget of $21,391, rising to $177,715 in the '82-83 school year; the revenue generated from contracts goes into the college's general fund. The contracts have covered instruction for about 35,000 students since 1969, and in '81-82 served 40 businesses (it also served 11 associations and unions and 20 public agencies).

- The Williamsport Area Community College, Williamsport Pennsylvania.

  The Center for Lifelong Education was established in 1979. Its third-year budget is $81,000 and by 1982 enrollment had climbed to just under 1,000.

Wytheville Community College, Wytheville, Virginia

The contracting program of the Continuing Education Division began in 1982 with a budget of $15,000, excluding salaries. About 600 students are participating in the early phase of the program.

These programs are fairly representative of the 15 programs studied by AACJC.

One characteristic of these programs is that if you list all the organizations being provided contract services you would see a broad cross section of industrial and government organizations, as well as a long list of courses being offered.40/ The list of companies would include GTE Sylvania, Inc. (Financial Planning Workshop), General Electric (Technical Writing), The Upjohn Company (Industrial Chemical Technology), The Princeton Plasma Physics Laboratory (Management Skills for Women), the Bank of Mid-Jersey (Principles of Evaluation), Consolidated Freightways (Data Processing), and General Hospital (Emergency Medical Technology).

There are, in looking at the listings for each school, a lot of large corporations. There are also smaller firms and nonprofit organizations. Studies show that the training investments of small firms are low, the presumption being that these firms cannot afford an in-house capability. The generic courses offered under contract do provide an opportunity to these firms, and if they take advantage of them there could be a vast market for such contracted

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40/ The examples below are not necessarily from the college programs summarized.

services, if education institutions do a good job of developing programs and marketing them.

If education and occupational training institutions achieve some visibility in the corporate community as successful deliverers of services to corporations, the respect for their capabilities will likely extend to their on-campus programs, and enhance the value of the degrees they award in the marketplace. Thus contracting out could have the effect of raising the visibility of the institution in the business community and generally improving the relationships between the school and the business sector.

10. SOME OBSERVATIONS

There are no simple generalizations that can be made from this survey of experience. It is obvious that there is very considerable collaboration occurring between corporations and schools, in a landscape that is uneven, and with a great many bare spots. There is, out there, a lot of experience to weigh, and for those interested in doing so, to build on.

A lot of what catches the eye seems to be a product of the last decade or so, with the exception of the long history of vocational education advisory councils and the longstanding involvement, until the 1960s, of business people in the affairs of the public schools. Not only is there more partnership effort, there is, very recently, a lot more written <u>about</u> partnerships. It is not always easy to separate the real trends from the upswing in the column inches written by researchers, evaluators, and reporters.

A reading of this survey highlights one central fact about the underlying forces common to partnership efforts: there are seeming contradictions of a substantial nature. How do you generalize about school partnerships with industry that are of three types: joint arrangements where industry pays schools for training and education services, arrangements where schools pay industry for such services, and arrangements where schools give away training to lure industry into states and localities? And how do you square the predominant opinion being voiced by industry representatives that "all we want the schools to do is teach the basics; we will do the training," when 300,000 to 400,000 business people take the time to serve

on the advisory committees of vocational programs that are teaching specific job skills? And when a substantial number of firms are donating equipment and instruction to schools so that those schools will do the training the companies need?

The explanation lies in our diversity, and the decentralization of both production and education decisions. Any employer and any school can enter into a cooperative arrangement. Employers have different needs at different times and in different places. Schools respond to the conditions they find themselves in and develop quite different perspectives on the best way to go about the education enterprise. We are a vast country, and we are both used to, and comfortable with, diversity. We have a rich experience to draw on.

It is clear that, diversity or not, more corporations and schools are finding that mutual needs are being served by collaborative arrangements of many kinds. A less comforting conclusion from this survey is that we are not yet very good at collecting the facts about this experience and arranging them in such a way that they can be helpful to people who are shopping for ways to join forces. It is not clear either that any single evaluation or clearinghouse system could usefully span the whole of corporation-school relationships. But if we are to find ways of serving the needs of those who are seeking, and drawing out latent forces that will expand these relationships, we have to find better ways than we now have of providing reliable information.

Then there are the deeper questions that go to such matters as the proper nature and scope of the education enterprise, and the

proper role of private enterprise in (1) aiding school systems and (2) trying to shape education to meet particular employer needs. This paper is only a small effort that describes experience as it is unfolding. Such deeper questions will be examined by many in light of practical experience with what seems to be happening and what the parties obtain from it. Others will start from philosophical premises and theories about educational policy and corporate vitality. Between the two, some balance will be struck.

There are, however, some important questions that can be discussed at this point: (1) how does leadership emerge, (2) who gets what from these partnerships, and (3) what succeeds and what fails? I will make a few observations about each of these questions, limited by the nature of this survey and the general absence of in-depth case studies, but supplemented by what I have learned from talking with people from business and education over many years.

Leadership and Motivations

In the adopt-a-school "movement," the predominant mode of getting started is that a business approaches a school, although there are instances where the leadership comes from a school system that approaches a corporation. The motivations of employers are several, and Michael Timpane is the only person I am aware of who has talked to a lot of employers about their reasons for initiating these efforts. He finds that the most basic reason springs from corporations' historic interest in "education as the fundamental continuing social enterprise developing skilled and productive

citizens."[41] Corporations view education as vital because "these citizens contribute to business as workers, consumers, and supporters of a democratic free enterprise system." Out of this general motivation arises a more specific focus of promoting "free enterprise education," "economic education," and efforts that bring about greater equality of educational opportunity. Also important to employers are the conditions in inner cities that threaten stability and the perceived general deterioration in education achievement that undermines the quality of the young labor force from which they will have to draw their workers.

Yet, despite these motivations, and the articulation of them by many people in business, the corporate interest in public education and special efforts to help are not particularly deep or even widespread. Only a fraction of corporate giving to education goes to elementary and secondary education. Timpane's conclusion is that "except for occasional appearances by chief executive officers and other senior executive at the beginning (of the program) or at special events--usually in the company of a few other CEOs--their involvement is rare." He acknowledges that there are notable exceptions. Leadership is left to middle-level executives, and sometimes to the public affairs office, where few risks will be taken and where the corporate image is a principal consideration. I find it hard to judge the corporate role as it is evolving against any sure standard; after all it can be argued that public education is

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41/ Timpane, op cit.

appropriately paid for by the public, and too much corporate involvement would be looked upon either as interference or as an attempt to skew public education toward specific corporate goals, and away from the mission of education of preparing young people for a full life. The new policy study underway by the Committee for Economic Development may shed some light on the appropriate corporate role in education, and give direction to corporate leadership in this important matter.

The most comprehensive and ambitious efforts at creating partnerships are the 150 or so collaborative councils, which involve not only business and education, but also labor, local government, and service organizations. These have been subjected to considerable study by Gerard Gold in his work at the National Institute for Work and Learning. The first era of collaborative councils, in which only a few were started, came out of the historic interest of corporations in economic education. A good example of these councils is the first one established in Youngstown, Ohio in 1947, which had the following mission:

> . . . to make clear to the public, and to employees of industry and business, how everyone in the . . . area makes his living--and, in the process, to point out that prosperity comes only from the continuous production of goods and services wanted all over the world. The people in the . . . area--especially the younger people--are also helped to recognize the job opportunities right here at home. Widespread misconceptions about industrial ownership and profits are corrected.[42/]

42/ Industrial Information Institute, Inc., A Four-County Center For Economic Education Through Industry-Schools Coorporation, Pamphlet, Youngstown, Ohio (cited in Gold, op cit.).

The next group of collaborative councils were formed in the 1960s and received their impetus from the urban civil rights movement and the urban riots. Gold reports that "the broad aim of these councils has been to work with minority neighborhood organizations to improve those neighborhoods through social and economic action, in which education, training, and work experience have been important factors." The earliest of these was New Detroit, formed in 1967. The largest wave of such councils came in the mid-1970s, and while they incorporated elements of the first two waves, they added a new dimension to their concerns. The new councils were responding to a growing national concern for youth unemployment, career awareness, and the institutional barriers affecting the transitions of all youth from school to work. An example of these new concerns is found in the stated purpose of the Work-Education Council of Southeastern Michigan, formed in 1977:

> to bring together representatives from education, business, industry, government and labor to serve as an effective force in the development and implementation of programs which will serve to facilitate the transition of our youth from school to the world of work.[43/]

As for leadership in the establishment of councils, business and education organizations clearly are dominant, with the initial effort sometimes coming from business and sometimes from education. This shared leadership dominates in just over over half of the councils. Leadership is broad based in one-fifth, meaning that it is shared by three or more sectors with no one sector dominant.

43/ Work-Education Council of Southeastern Michigan, Restated Articles of Incorporation, filed February 23, 1977 (cited in Gold, op cit.).

A combination of education and local government dominate in just under a fifth. In 7 percent, business primarily dominates, and education alone dominates in only 2 percent.

Vocational education started out as a collaborative venture among the National Association of Manufacturers, the AFL-CIO, and reform-minded educators. They combined forces to get the Smith Hughes Act passed in 1917. As pointed out earlier, the principal business role has been exercised through the continuously growing number of advisory committees. Vocational education has received considerable criticism for not involving employers sufficiently. The American Vocational Association is now emphasizing increased involvement of business, and the legislation just submitted by AVA to the Congress attempts to give greater voice to industry in shaping vocational education. A recent AVA publication states: "The AVA draft bill hammers away at the importance of involving business and industry in vocational technical education to make certain that the programs meet the needs of the employers. Yet an emphasis on the interests of individuals is retained."[44/] Vocational education is a vast enterprise, and employer involvement is along a continuum from practically none to very substantial; a single generalization is not possible. Yet, I would venture the observation that business has not asserted itself in any consistent fashion to demand a greater voice in decisions, although there is substantial business criticisms of vocational education (as well as substantial support in state and federal legislatures).

44/ Udate: The Newspaper for Vocational Educators, Summer 1983.

Cooperative education is within vocational education, but incorporates business in the educational enterprise. While the schools must take the initiative in getting employer agreement and participation, the fact that half a million secondary students are enrolled, and the fact that this form of vocational education is growing at the community college level, is testimony to the ability of cooperative education to involve employers in a joint education enterprise.

Experience-Based Career Education is a new form of partnership that appeared on the scene in the 1970s, with the initial leadership coming from the federal government, and with continued technical assistance, encouragement, and evaluation provided by the National Institute of Education. At the local level, it falls to the schools adopting this model to secure employer involvement, and this has now occurred in about 150 school districts.

The motivation for the ties between education/training and economic development has its strength in state and local government efforts to attract industry or expand existing industries. The economic development agency or the vocational education agency takes the lead. In partnerships where industry contracts with education for services, the initiative (in the models I have reviewed) comes from the entrepreneurial efforts of the community colleges. The same holds true in those colleges where the training is contracted out to industry.

I have discussed a now familiar set of partnerships under the heading "Transitions to Work" that mainly deal with getting minorities and the disadvantaged ready for, and into, the labor

market. In these efforts there has been considerable initiative on the part of employers, and the motivations have been to help with the enormous problem the nation confronts in high youth unemployment, and to help young people obtain the basic skills they need to succeed in the employment world. There is now an extensive literature available on these efforts, and the paper being written by Richard Lacey for the National Commission for Employment Policy goes deeper into the functioning of such partnerships.

What the Partners Get

Partnerships, almost by definition, must be providing some benefit to both parties. I have described a great many kinds of partnerships, and the benefits vary with each type. They also vary as to who is the most active partner, and who takes the most responsibility. Even in partnerships of the same type, the parties may perceive their benefits differently. An employer who adopts-a-school may be aiming to identify the company as being a good citizen in the community. Another may have a deep concern about declines in academic standards, and expects that by helping to raise those standards, the company will benefit at the hiring office. Still another may see an opportunity to shape student--through donations of word processing equipment or help with curriculum, for example--to meet a specific labor shortage. It would be a considerable research project, and one perhaps worth doing, to identify--through in-depth interviews--what the parties expect to get from partnerships, and what kinds of benefits would encourage more of them to enter into partnerships.

There is a more complex set of questions that will be raised by those thoughtful about the role of education and the appropriate use of corporate resources in support of public ventures. Some will ask about the benefits and costs to the public interest as a whole if corporations and schools become broadly entangled. Others will ask whether stockholders are fairly treated when corporations spend their profits on the schools.

My brief survey, and the materials available to me, do not permit definitive answers to the question, "what is the bottom line?" But I will offer some possibilities, or hypotheses that might be tested. Some I am sure of, but in many cases I am speculating. Payoffs to <u>corporations</u> may encompass the following:

- o better understanding by young people of how the economy works and more appreciation for the private enterprise system
- o a better educated workforce in general
- o an improved image for the corporation
- o more social stability in the neighborhoods where corporations produce or sell
- o better informed consumers, and better informed voters
- o lower costs when locating in a state that provides free training to attract business
- o training in vocational education schools that more nearly matches what employers need
- o training in vocational schools that have equipment similar to what employers use
- o employee satisfaction from working for a company that does good things for communities

- o bottom line results in terms of productivity and product quality resulting from education and training improvements

- o a population more literate in technology and computers, and more interested in using the products of a high tech economy

And what might <u>schools</u> be getting out of partnerships?

- o a broadened base for the support of an education system that is increasingly blamed for shortcomings in students

- o greater recognition of schools and what they contribute to business and the economy

- o financial resources at a time when they are in short supply

- o business people to come into the schools and help educate students about careers and job opportunities

- o access to expensive "state-of-the-art" equipment

- o support for appropriations before legislatures, and backing in school bond drives

- o help on management problems

- o use of employer facilities and personnel for student instruction

- o experience for their students in schools that place priority on the role of experience in learning

- o access to employers to place their students when they graduate

- o alternatives for imparting basic skills to students who are hard to teach in traditional settings

- o training provided by businesses through contracts when job openings do not warrant establishing regular occupational courses

- o graduates who have a better understanding of how the economy works

This list is probably incomplete, but it might provide a starting point for additional study of the benefits of partnerships.

What Succeeds and What Fails

This brief survey does not provide a sufficient basis for good answers to this very important question. To answer it requires the tracking of partnerships for sufficient periods of time to find out what the dynamics are. Partnerships are being started all the time; they are also dying all the time. Often they stop when a specific objective has been reached. Or they stop when a key individual leaves a firm or leaves a school system. Collaborative councils sometimes take root in a community and are sustained for decades. Others operate for a while and falter when the initial funding from government or a foundation comes to an end. Communities differ greatly in their cohesiveness because of their different histories and cultures.

It would be possible to provide some logical sounding reasons for continued success. One can make pronouncements such as "a partnership effort must have the sustained support of the Chief Executive Officer." But in the absence of careful study and tracking, such pronouncements might not only be less than useful, they might be absolutely wrong. The matter of success and failure is not raised here because it can be addressed based on this survey. It is raised instead because it is important to know more about. The best approach would be to track a variety of new partnerships on a longitudinal basis and study their dynamics in order to identify critical elements to success and failure. The second best approach would be retrospective case studies. One set of partnerships that have shown

endurance, and where the parties to them believe they meet their needs, would be identified. Another set of partnerships that faltered would be identified. These two sets would be subjected to intensive case study, and the causes of success and failure isolated. This second approach would be quicker and less costly, but it depends on the ability to reconstruct events that have already happened.

Recommendations

This paper only scratches the surface of what is a very important subject. It is my hope that it will suggest additional work, and while I have already made several suggestions, I will summarize briefly what these future directions might be:

1. The adopt-a-school "movement" is in progress. Yet there is no storehouse of information about what is going on, and no way for employers and schools to get reliable information about specific experiences that would help them fashion efforts that meet their particular needs and objectives. Better information needs to be collected and made available.

2. Collaborative councils are also a growing phenemenon, but there has been only one intensive study carried out by the National Institute for Work and Learning in 1980 and 1981. What this movement needs is a regular system of networking so that councils can learn from each other.

3. If there are to be growing alliances between schools and corporations, then we need to know how these alliances are changing education, and whether all that is done is in the broader interests of education and the public interest.

4. We need firmer information about the real advantages that accrue to both corporations and schools, so that others can judge whether to move in this direction.

5. We need either longitudinal or retrospective studies of what factors contribute to the success or failure of partnerships, so others are not doomed to make the same mistakes, and can enter partnerships with sufficient information to make them work.